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NEWS	4	DEC 08	INPADOC: Legal Status data reloaded
NEWS	5	SEP 29	DISSABS now available on STN
NEWS	6	OCT 10	PCTFULL: Two new display fields added
NEWS	7	OCT 21	BIOSIS file reloaded and enhanced
NEWS	8	OCT 28	BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS	9	NOV 24	MSDS-CCOHS file reloaded
NEWS	10	DEC 08	CABA reloaded with left truncation
NEWS	11	DEC 08	IMS file names changed
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NEWS	13	DEC 09	STN Entry Date available for display in REGISTRY and CA/CAPLUS
NEWS	14	DEC 17	DGENE: Two new display fields added
NEWS	15	DEC 18	BIOTECHNO no longer updated
NEWS	16	DEC 19	CROPU no longer updated; subscriber discount no longer available
NEWS	17	DEC 22	Additional INPI reactions and pre-1907 documents added to CAS databases
NEWS	18	DEC 22	IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS	19	DEC 22	ABI-INFORM now available on STN
NEWS	20	JAN 27	Source of Registration (SR) information in REGISTRY updated and searchable
NEWS	21	JAN 27	A new search aid, the Company Name Thesaurus, available in CA/CAPLUS
NEWS	22	FEB 05	German (DE) application and patent publication number format changes
NEWS	23	MAR 03	MEDLINE and LMEDLINE reloaded
NEWS	24	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS	25	MAR 03	FRANCEPAT now available on STN
NEWS EXPRESS			MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

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FILE COVERS 1907 - 15 Mar 2004 VOL 140 ISS 12  
FILE LAST UPDATED: 14 Mar 2004 (20040314/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.44	0.65

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FILE 'BIOSIS' ENTERED AT 08:19:56 ON 15 MAR 2004  
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=> "adenovirus vector"  
L1 5623 "ADENOVIRUS VECTOR"

=> "HIV antigen"  
L2 1216 "HIV ANTIGEN"

=> L1 and L2  
L3 5 L1 AND L2

=> D L3 IBIB TI SO AU ABS 1-5

L3 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2003:757477 CAPLUS  
DOCUMENT NUMBER: 139:291099  
TITLE: Recombinant adenoviral vectors encoding chimeric HIV-1  
antigens for use as vaccine against HIV infection

INVENTOR(S): Emini, Emilio A.; Shiver, John W.; Casimiro, Danilo R.; Bett, Andrew J.; Liang, Xiaoping; Fu, Tong-ming  
 PATENT ASSIGNEE(S): Merck & Co., Inc., USA  
 SOURCE: PCT Int. Appl., 114 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003077859	A2	20030925	WO 2003-US7727	20030312
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2002-363807P P 20020313

TI Recombinant adenvorial vectors encoding chimeric HIV-1 antigens for use as vaccine against HIV infection

SO PCT Int. Appl., 114 pp.

CODEN: PIXXD2

IN Emini, Emilio A.; Shiver, John W.; Casimiro, Danilo R.; Bett, Andrew J.; Liang, Xiaoping; Fu, Tong-ming

AB An efficient means of inducing an immune response against human immunodeficiency virus (HIV) utilizing specific prime-boost regimes is disclosed. The specific prime-boost regimes employ a heterologous prime-boost protocol employing recombinant adenoviral vectors of alternative and distinct serotypes with deleted E1 comprising exogenous genetic material encoding a common **HIV antigen**.  
 Vaccines administered into living vertebrate tissue in accordance with the disclosed regimes, preferably a mammalian host, such as a human or a non-human mammal of com. or domestic veterinary importance, express the HIV-1 antigen (e.g. gag, pol, and nef), inducing a cellular immune response which specifically recognizes HIV-1. It is believed that the disclosed prime/boost regime will offer a prophylactic advantage to previously uninfected individuals and/or provide a therapeutic effect by reducing viral load levels within an infected individual, thus prolonging the asymptomatic phase of HIV-1 infection.

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:710252 CAPLUS

DOCUMENT NUMBER: 139:228916

TITLE: Enhanced mucosal immunoglobulin A response of intranasal adenoviral vector human immunodeficiency virus vaccine and localization in the central nervous system

AUTHOR(S): Lemiale, Franck; Kong, Wing-pui; Akyuerek, Levent M.; Xu, Ling; Huang, Yue; Chakrabarti, Bimal K.; Eckhaus, Michael; Nabel, Gary J.

CORPORATE SOURCE: Vaccine Research Center, National Institutes of Health, NIAID, Bethesda, MD, 20892, USA

SOURCE: Journal of Virology (2003), 77(18), 10078-10087  
 CODEN: JOVIAM; ISSN: 0022-538X

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Enhanced mucosal immunoglobulin A response of intranasal adenoviral vector human immunodeficiency virus vaccine and localization in the central nervous system

SO Journal of Virology (2003), 77(18), 10078-10087  
CODEN: JOVIAM; ISSN: 0022-538X

AU Lemiale, Franck; Kong, Wing-pui; Akyurek, Levent M.; Xu, Ling; Huang, Yue; Chakrabarti, Bimal K.; Eckhaus, Michael; Nabel, Gary J.

AB Replication-defective adenovirus (ADV) vectors represent a promising potential platform for the development of a vaccine for AIDS. Although this vector is typically administered i.m., it would be desirable to induce mucosal immunity by delivery through alternative routes. In this study, the immune response and biodistribution of ADV vectors delivered by different routes were evaluated. ADV vectors expressing human immunodeficiency virus type 1 (HIV-1) Gag, Pol, and Env were delivered i.m. or intranasally into mice. Intranasal immunization induced greater HIV-specific IgA responses in mucosal secretions and sera than in animals with i.m. injection, which showed stronger systemic cellular and IgG responses. Administration of the vaccine through an intranasal route failed to overcome prior ADV immunity. Animals exposed to ADV prior to vaccination displayed substantially reduced cellular and humoral immune responses to **HIV antigens** in both groups, though the reduction was greater in animals immunized intranasally. This inhibition was partially overcome by priming with a DNA expression vector expressing HIV-1 Gag, Pol, and Env before boosting with the viral vector. Biodistribution of recombinant adenovirus (rADV) vectors administered intranasally revealed infection of the central nervous system, specifically in the olfactory bulb, possibly via retrograde transport by olfactory neurons in the nasal epithelium, which may limit the utility of this route of delivery of ADV vector-based vaccines.

REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:522763 CAPLUS

DOCUMENT NUMBER: 122:263522

TITLE: Adenovirus carrying foreign antigen genes for use in vaccines

INVENTOR(S): Davis, Alan Robert; Hung, Paul Porwen; Lubeck, Michael David; Natuk, Robert James; Chanda, Pranab Kumar; Murthy, Shridhara Chikkatur Shankaranarayana; Lee, Shaw-Guang Lin

PATENT ASSIGNEE(S): American Home Products Corp., USA

SOURCE: Eur. Pat. Appl., 25 pp.  
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 638316	A1	19950215	EP 1994-305656	19940729
EP 638316	B1	20030528		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
AT 241385	E	20030615	AT 1994-305656	19940729
AU 9468891	A1	19950223	AU 1994-68891	19940803
FI 9403626	A	19950212	FI 1994-3626	19940804
ZA 9405843	A	19960205	ZA 1994-5843	19940804
IL 110560	A1	19981030	IL 1994-110560	19940804
CA 2130202	AA	19950212	CA 1994-2130202	19940808
BR 9403202	A	19950411	BR 1994-3202	19940808
JP 07145079	A2	19950606	JP 1994-185752	19940808
HU 69793	A2	19950928	HU 1994-2309	19940808
AU 9748506	A1	19980326	AU 1997-48506	19971219

US 6511845 B1 20030128 US 2000-618360 20000718  
 PRIORITY APPLN. INFO.: US 1993-105232 A 19930811  
 US 1994-276289 A 19940720  
 US 1992-926491 B2 19920807  
 IL 1993-106508 A0 19930728  
 US 1993-926491 A 19930811  
 US 1999-457421 A1 19991207

TI Adenovirus carrying foreign antigen genes for use in vaccines  
 SO Eur. Pat. Appl., 25 pp.  
 CODEN: EPXXDW  
 IN Davis, Alan Robert; Hung, Paul Porwen; Lubeck, Michael David; Natuk, Robert James; Chanda, Pranab Kumar; Murthy, Shridhara Chikkatur Shankaranarayana; Lee, Shaw-Guang Lin  
 AB Adenovirus carrying an antigen gene is described for use in vaccines for the induction of novel antibodies or of cell-mediated immunity. The virion structural protein is not changed but part of early region 3 is deleted from the viral genome and replaced with an antigen gene. A group of viruses carrying genes for proteins of HIV-1 were constructed by standard methods and shown to direct synthesis of the antigens in animal cell culture. A series of treatment regimens using different paths of administration and dosages were used to study the efficacy of vaccine strains in chimpanzee and in dog. The virus survived and propagated in the host animals and induced antigenic responses with most of the response directed against the adenovirus and a fraction of the response directed against the **HIV antigen**. The use of subunit vaccines as boosters greatly increased the immune response and help to provide protection against HIV challenge to the chimpanzees.

L3 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1994:407307 CAPLUS  
 DOCUMENT NUMBER: 121:7307  
 TITLE: Recombinant adenovirus vaccines  
 INVENTOR(S): Davis, Alan R.; Hung, Paul P.; Lubeck, Michael D.; Natuk, Robert J.; Chanda, Pranab K.; Murthy, Shridhara C. S.; Lee, Shaw Guang L.  
 PATENT ASSIGNEE(S): American Home Products Corp., USA  
 SOURCE: Can. Pat. Appl., 23 pp.  
 CODEN: CPXXEB  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2101463	AA	19940208	CA 1993-2101463	19930728
EP 586076	A2	19940309	EP 1993-305833	19930723
EP 586076	A3	19940420		
EP 586076	B1	20030625		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
ZA 9305355	A	19950123	ZA 1993-5355	19930723
AT 243755	E	20030715	AT 1993-305833	19930723
IL 106508	A1	19980222	IL 1993-106508	19930728
BR 9303226	A	19940308	BR 1993-3226	19930730
JP 06165689	A2	19940614	JP 1993-193410	19930804
AU 9344465	A1	19940210	AU 1993-44465	19930806
AU 680826	B2	19970814		
HU 67302	A2	19950328	HU 1993-2285	19930806
HU 214364	B	19980330		
AU 9734227	A1	19971120	AU 1997-34227	19970818
AU 715190	B2	20000120		
US 6511845	B1	20030128	US 2000-618360	20000718
PRIORITY APPLN. INFO.:				
			US 1992-926491	A 19920807
			US 1993-105232	B2 19930811

US 1994-276289 B2 19940720  
US 1999-457421 A1 19991207

TI Recombinant adenovirus vaccines  
SO Can. Pat. Appl., 23 pp.  
CODEN: CPXXEB  
IN Davis, Alan R.; Hung, Paul P.; Lubeck, Michael D.; Natuk, Robert J.;  
Chanda, Pranab K.; Murthy, Shridhara C. S.; Lee, Shaw Guang L.  
AB The invention provides a method of producing antibodies or cell-mediated  
immunity to an infectious organism in a warm blooded mammal which  
comprises administering to the mammal intranasally, i.m., or s.c., live  
recombinant adenoviruses in which the virion structural protein is  
unchanged from that in the native adenovirus from which the recombinant  
adenovirus is produced, and which contain the gene coding for the antigen  
corresponding to said antibodies or inducing said cell mediated immunity.  
Several type 4, type 5, and type 7 adenoviruses in which the E3 region had  
been deleted and in which HIV-1 env, or gag-pro, or rev sequences had been  
inserted, were prepared Intranasal administration of recombinant  
adenoviruses to naive chimpanzees resulted in both priming and boosting of  
both humoral and cell-mediated immune responses directed at HIV  
recombinant antigens. The inoculated chimpanzees were shown to produce  
antibodies to the env and gag proteins of HIV. IgG antibodies specific  
for HIV were observed in nasal, saliva, and vaginal secretions following  
administration of the recombinant adenoviruses and IgA antibodies specific  
for HIV were observed in nasal and saliva secretions. Administration of the  
recombinant viruses by the intranasal route was superior to administration  
of enteric-coated viruses by the oral route.

L3 ANSWER 5 OF 5 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
ACCESSION NUMBER: 1991:319795 BIOSIS  
DOCUMENT NUMBER: PREV199192030310; BA92:30310  
TITLE: IMMUNE RESPONSE TO HIV-1 GAG ANTIGENS INDUCED BY  
RECOMBINANT **ADENOVIRUS VECTORS** IN MICE  
AND RHESUS MACAQUE MONKEYS.  
AUTHOR(S): PREVEC L [Reprint author]; CHRISTIE B S; LAURIE K E; BAILEY  
M M; GRAHAM F L; ROSENTHAL K L  
CORPORATE SOURCE: BIOL DEP, MCMASTER UNIV, HAMILTON, ONTARIO, CAN L8N 3Z5  
SOURCE: Journal of Acquired Immune Deficiency Syndromes, (1991)  
Vol. 4, No. 6, pp. 568-576.  
CODEN: JAISSET. ISSN: 0894-9255.  
DOCUMENT TYPE: Article  
FILE SEGMENT: BA  
LANGUAGE: ENGLISH  
ENTRY DATE: Entered STN: 15 Jul 1991  
Last Updated on STN: 15 Jul 1991

TI IMMUNE RESPONSE TO HIV-1 GAG ANTIGENS INDUCED BY RECOMBINANT  
**ADENOVIRUS VECTORS** IN MICE AND RHESUS MACAQUE MONKEYS.  
SO Journal of Acquired Immune Deficiency Syndromes, (1991) Vol. 4, No. 6, pp.  
568-576.  
CODEN: JAISSET. ISSN: 0894-9255.  
AU PREVEC L [Reprint author]; CHRISTIE B S; LAURIE K E; BAILEY M M; GRAHAM F  
L; ROSENTHAL K L  
AB Recombinant **adenovirus vectors** expressing the entire  
gag (p55) or CA (p24) region of human immunodeficiency virus type 1  
(HIV-1) were constructed by inserting the appropriate HIV DNA sequences  
into the E3 region of human adenovirus type 5 (Ad5) with and without an  
exogenous SV40 early promoter. The infectious recombinant adenoviruses  
Adgag1, AdSVgag1, and AdSVCA1 were shown to express the appropriate HIV-1  
antigens in human cells in vitro, as measured by immunoprecipitation and  
p24 antigen capture assays. Using the p24 antigen capture assay,  
**HIV antigen** expressed by AdSVCA1 was detected earlier in  
infection and in greater amounts than that produced by either Adgag1 or  
AdSVgag1. In studies concerning the immunogenicity of these vectors,  
Balb/c (H-2d) mice given a single intraperitoneal injection of 107 or 108  
plaque-forming units of purified vector developed serum antibodies to p24

detected by Western blotting, by 2 weeks postinjection. In the preliminary test of the immunogenicity of the recombinant **adenovirus vectors** in primates, two of four rhesus macaque monkeys generated antibodies to HIV-1 p24 following two injections of AdSVCA1. As expected, monkeys injected with control adenovirus failed to show any anti-HIV response, and none of the monkeys showed any adverse reactions following infection with either recombinant or control adenoviruses. These results suggest that **adenovirus vectors** have considerable potential in the study of possible immune therapies for HIV infection.

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1988:144658 CAPLUS

DOCUMENT NUMBER: 108:144658

TITLE: Recombinant adenovirus as a vehicle for the HBV surface antigen or **HIV envelope protein** genes

AUTHOR(S): Hung, Paul P.; Morin, John E.; Lubeck, Michael D.; Barton, Joan E.; Molnar-Kimber, Katherine L.; Mason, Bruce B.; Dheer, Surendra K.; Jarocki-Witek, Valentina; Kostek, Beverley; et al.

CORPORATE SOURCE: Microbiol. Div., Wyeth Lab., Inc., Philadelphia, PA, 19101, USA

SOURCE: UCLA Symposia on Molecular and Cellular Biology, New Series (1988), 71(Hum. Retroviruses, Cancer, AIDS), 349-61

CODEN: USMBD6; ISSN: 0735-9543

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Recombinant adenovirus as a vehicle for the HBV surface antigen or **HIV envelope protein** genes

SO UCLA Symposia on Molecular and Cellular Biology, New Series (1988), 71(Hum. Retroviruses, Cancer, AIDS), 349-61  
CODEN: USMBD6; ISSN: 0735-9543

AU Hung, Paul P.; Morin, John E.; Lubeck, Michael D.; Barton, Joan E.; Molnar-Kimber, Katherine L.; Mason, Bruce B.; Dheer, Surendra K.; Jarocki-Witek, Valentina; Kostek, Beverley; et al.

AB Recombinant adenovirus type 5 was made to carry the hepatitis B virus surface antigen (HBsAg)-coding sequence in the adenovirus E3 region for the production of HBsAg. This HBsAg was secreted into the medium in tissue culture and has the immunol. and biochem. properties of the 22 nm particles found in human serum. Addnl., the recombinant adenoviruses grew normally in all human cells tested. A hamster model was developed to evaluate the immunogenic properties of these recombinant adenoviruses. Upon intranasal inoculation, both wild-type adenovirus and an adenovirus, in which the E3 region was deleted, replicated in the lungs of these animals and induced an antibody response against adenovirus. Hamsters similarly immunized with the live recombinant adenoviruses produced antibody against both adenovirus and HBsAg. Recombinant adenovirus type 7 carrying the **HIV envelope protein** coding sequence was also constructed. Expression of **HIV envelope protein** was demonstrated by using cytoimmunofluorescence and immunopptn.



L5 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1988:568506 CAPLUS

DOCUMENT NUMBER: 109:168506

TITLE: Expression of HBV surface antigen or **HIV envelope protein** using recombinant **adenovirus vectors**

AUTHOR(S): Hung, Paul P.; Morin, John E.; Lubeck, Michael D.; Barton, Joan E.; Molnar-Kimber, Katherine L.; Mason, Bruce B.; Dheer, Surendra K.; Jarocki-Witek, Valentina; Kostek, Beverley; et al.

CORPORATE SOURCE: Microbiol. Div., Wyeth Laboratories, Inc., Philadelphia, PA, 19101, USA

SOURCE: Natural Immunity and Cell Growth Regulation (1988), 7(3), 135-43

CODEN: NICRDR; ISSN: 0254-7600

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Expression of HBV surface antigen or **HIV envelope protein** using recombinant **adenovirus vectors**

SO Natural Immunity and Cell Growth Regulation (1988), 7(3), 135-43  
CODEN: NICRDR; ISSN: 0254-7600

AU Hung, Paul P.; Morin, John E.; Lubeck, Michael D.; Barton, Joan E.; Molnar-Kimber, Katherine L.; Mason, Bruce B.; Dheer, Surendra K.; Jarocki-Witek, Valentina; Kostek, Beverley; et al.

AB Recombinant adenoviruses were constructed that contained either the hepatitis virus Bs antigen (HBsAg) coding sequence or the human immunodeficiency virus (**HIV envelope protein**) coding sequence. The recombinant adenoviruses can replicate normally in cultured human cells. Cells infected with the adenovirus-HBV recombinant secreted HBsAg into the tissue culture medium. This HBsAg had immunol. and phys. properties similar to those of the 22-nm particles found in human serum. Expression of **HIV envelope protein** in cells infected with the adenovirus-HIV recombinant was demonstrated. A hamster model was developed to evaluate the immunogenic properties of adenovirus-HBV recombinants. Hamsters inoculated intranasally with live adenovirus-HBV recombinant produced antibody against both adenovirus and hepatitis B virus surface antigen.

L5 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
 ACCESSION NUMBER: 1988:451754 BIOSIS  
 DOCUMENT NUMBER: PREV198835092634; BR35:92634  
 TITLE: EXPRESSION OF **HIV ENVELOPE PROTEIN** COMPARED TO EXPRESSION OF HBV SURFACE ANTIGEN USING RECOMBINANT **ADENOVIRUS VECTORS**.  
 AUTHOR(S): MORIN J E [Reprint author]; BHAT B M; MOLNAR-KIMBER K L; MASON B B; DHEER S; CHANDA P K; CONLEY A J; DAVIS A R; HUNG P P  
 CORPORATE SOURCE: WYETH-AYERST RES, PO BOX NO 8299, PHILADELPHIA, PA 19101, USA  
 SOURCE: Journal of Cellular Biochemistry Supplement, (1988) No. 12 PART D, pp. 66.  
 Meeting Info.: SYMPOSIUM ON THE MOLECULAR BIOLOGY OF RNA HELD AT THE 17TH ANNUAL UCLA (UNIVERSITY OF CALIFORNIA-LOS ANGELES) SYMPOSIA ON MOLECULAR AND CELLULAR BIOLOGY, KEYSTONE, COLORADO, USA, APRIL 4-10, 1988. J CELL BIOCHEM SUPPL.  
 ISSN: 0733-1959.  
 DOCUMENT TYPE: Conference; (Meeting)  
 FILE SEGMENT: BR  
 LANGUAGE: ENGLISH  
 ENTRY DATE: Entered STN: 10 Oct 1988  
 Last Updated on STN: 10 Oct 1988  
 TI EXPRESSION OF **HIV ENVELOPE PROTEIN** COMPARED TO EXPRESSION OF HBV SURFACE ANTIGEN USING RECOMBINANT **ADENOVIRUS VECTORS**.  
 SO Journal of Cellular Biochemistry Supplement, (1988) No. 12 PART D, pp. 66.  
 Meeting Info.: SYMPOSIUM ON THE MOLECULAR BIOLOGY OF RNA HELD AT THE 17TH ANNUAL UCLA (UNIVERSITY OF CALIFORNIA-LOS ANGELES) SYMPOSIA ON MOLECULAR AND CELLULAR BIOLOGY, KEYSTONE, COLORADO, USA, APRIL 4-10, 1988. J CELL BIOCHEM SUPPL.  
 ISSN: 0733-1959.  
 AU MORIN J E [Reprint author]; BHAT B M; MOLNAR-KIMBER K L; MASON B B; DHEER S; CHANDA P K; CONLEY A J; DAVIS A R; HUNG P P

L5 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
 ACCESSION NUMBER: 1988:461174 BIOSIS  
 DOCUMENT NUMBER: PREV198886102893; BA86:102893  
 TITLE: EXPRESSION OF HBV SURFACE ANTIGEN OR **HIV ENVELOPE PROTEIN** USING RECOMBINANT **ADENOVIRUS VECTORS**.  
 AUTHOR(S): HUNG P P [Reprint author]; MORIN J E; LUBECK M D; BARTON J E; MOLNAR-KIMBER K L; MASON B B; DHEER S K; JAROCKI-WITEK V; KOSTEK B; ET AL  
 CORPORATE SOURCE: WYETH LAB, INC, MICROBIOLOGY DIV, PO BOX 8299, PHILADELPHIA, PA 19101, USA  
 SOURCE: Natural Immunity and Cell Growth Regulation, (1988) Vol. 7, No. 3, pp. 135-143.  
 CODEN: NICRDR. ISSN: 0254-7600.  
 DOCUMENT TYPE: Article  
 FILE SEGMENT: BA  
 LANGUAGE: ENGLISH  
 ENTRY DATE: Entered STN: 18 Oct 1988  
 Last Updated on STN: 18 Oct 1988  
 TI EXPRESSION OF HBV SURFACE ANTIGEN OR **HIV ENVELOPE PROTEIN** USING RECOMBINANT **ADENOVIRUS VECTORS**.  
 SO Natural Immunity and Cell Growth Regulation, (1988) Vol. 7, No. 3, pp. 135-143.  
 CODEN: NICRDR. ISSN: 0254-7600.  
 AU HUNG P P [Reprint author]; MORIN J E; LUBECK M D; BARTON J E; MOLNAR-KIMBER K L; MASON B B; DHEER S K; JAROCKI-WITEK V; KOSTEK B; ET AL  
 AB Recombinant adenoviruses were constructed that contained either the HBsAg coding sequence or the **HIV envelope protein** coding sequence. The recombinant adenoviruses can replicate normally in cultured human cells. Cells infected with the adenovirus-HBV recombinant secreted HBsAg into the tissue culture medium. The HBsAg had immunological and physical properties similar to those of the 22-nm particles found in human serum. Expression of **HIV envelope protein** in cells infected with the adenovirus-HIV recombinant was demonstrated using cytoimmunofluorescent and immunoprecipitation. A hamster model was developed to evaluate the immunogenic properties of adenovirus-HBV recombinants. Hamsters inoculated intranasally with live adenovirus-HBV recombinant produced antibody against both adenovirus and hepatitis B virus surface antigen.

L7 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:31682 CAPLUS

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TITLE: **Adenovirus vector** containing human immunodeficiency virus (HIV) gene gag, and its use as a vaccine

INVENTOR(S): Chen, Ling; Shiver, John; Bett, Andrew J.; Casimiro, Danilo Riguera; Caulfield, Michael J.; Chastain, Michael A.; Emini, Emilio A.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

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RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1200622	A1	20020502	EP 2000-945133	20000703
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
JP 2003530307	T2	20031014	JP 2001-508378	20000703
US 2002061517	A1	20020523	US 2001-818443	20010327
US 2003228329	A1	20031211	US 2003-461030	20030613
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			US 1999-148981P	P 19990813
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TI **Adenovirus vector** containing human immunodeficiency virus (HIV) gene gag, and its use as a vaccine

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IN Chen, Ling; Shiver, John; Bett, Andrew J.; Casimiro, Danilo Riguera; Caulfield, Michael J.; Chastain, Michael A.; Emini, Emilio A.

AB The invention provides replication defective adenoviral vectors, derived from adenoviruses 2 and 5, where the E1 or E3 regions are deleted and replaced with a gene expression cassette. The gene expression cassette can comprise: (1) a human immunodeficiency virus 1 (HIV-1) gag gene, which contains codons for optimal expression in a human host, linked to a heterologous promoter (such as CMV promoter), and a transcription terminator; or (2) a humanized HIV-1 gag gene linked to the tPA leader sequence under the control of human CMV promoter and intron A. The invention also provides adenoviral shuttle plasmid vectors containing an adenoviral portion and a plasmid portion. The invention further provides cells transformed with adenoviral vectors, and use of these cells in the recombinant production of adenoviral vectors. Still further, the invention provides for the use of said adenoviral vectors and plasmid vectors containing the **HIV gag** gene but no adenoviral sequences as vaccines, which are able to mount an immune response against HIV-1. Finally, the invention provides the DNA sequence of HIV-1 gag gene, which contains codons for optimal expression in a human host. In the example section, the invention discussed the construction of two adenoviral shuttle plasmids, pA1-CMV1-tpaHIVgag and pA1-CMVI-FLHIVgag, and the recombinant viruses produced from these plasmids in transformed cells. The invention discussed that the viral vaccine can effectively prevent HIV infection when administered to humans either alone or as part of a prime and boost regime also with a vaccine plasmid. The invention also presented Phase I clin. trails results using a recombinant adenovirus 5 gag vector and **HIV gag** DNA plasmid.

produced by using these adenoviral vectors. These results indicate that the adenovirus based expression system is useful for large scale preparation of high-titer lentiviral vectors. Because CD4 positive T-cells and hematopoietic stem cells are important target cells for gene therapy of various disorders, this new method would facilitate the development of such gene therapy strategies.

L7 ANSWER 4 OF 5 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
 ACCESSION NUMBER: 2001:322096 BIOSIS  
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 TITLE: A new strategy for large scale preparation of high-titer HIV vectors using adenovirus-based expression vectors.  
 AUTHOR(S): Miyake, Koichi [Reprint author]; Suzuki, Noriko [Reprint author]; Hirai, Yukihiro [Reprint author]; Shimada, Takashi [Reprint author]  
 CORPORATE SOURCE: Department of Biochemistry and Molecular Biology, Division of Gene Therapy Research Center for Advanced Medical Technology, Nippon Medical School, Tokyo, Japan  
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TI A new strategy for large scale preparation of high-titer HIV vectors using adenovirus-based expression vectors.  
 SO Blood, (November 16, 2000) Vol. 96, No. 11 Part 1, pp. 430a. print.  
 Meeting Info.: 42nd Annual Meeting of the American Society of Hematology. San Francisco, California, USA. December 01-05, 2000. American Society of Hematology.  
 CODEN: BLOOAW. ISSN: 0006-4971.

AU Miyake, Koichi [Reprint author]; Suzuki, Noriko [Reprint author]; Hirai, Yukihiro [Reprint author]; Shimada, Takashi [Reprint author]  
 AB HIV based lentiviral vectors were originally designed for gene therapy of AIDS. Recently, it was demonstrated that HIV vectors were capable of gene transfer into non-dividing cells. HIV vectors pseudotyped with VSV-G envelopes were successfully used for stable transduction of neurons, hepatocytes, and hematopoietic progenitor cells. One serious limitation is the difficulty in large scale preparation of HIV vectors, since the stable and reliable packaging cell lines have not been established yet. Currently, HIV vectors are being prepared by time-consuming transfection of 293T cells in large numbers of plates with packaging and vector plasmids. The titer of the HIV vector determined by transduction of CD4 positive HeLa cells is less than 10<sup>5</sup> cfu/ml. To overcome this problem, we are attempting to develop a new packaging strategy for preparation of a large amount of high titer HIV vectors using adenoviral vectors. Replication defective **adenovirus vectors** containing the HIV gag, pol, and RRE sequences (Ad.CAGgpr) and the HIV env gene (Ad.CAGenv) driven by the CMV/actin hybrid promoter were constructed. The HIV vector carrying the GFP gene (GFP/HX4) were generated in 293T cells by transduction with the adenoviral vectors Ad.CAGgpr and Ad.CAG/env and transfection with the vector plasmid pGFP/HX4. High levels of p24 and gp120 expression were observed by Northern and ELISA assays. The titer of the HIV vector in the culture supernatants was at least 10 folds higher than that prepared by the conventional transfection method. The HIV vectors were purified and concentrated by the combination of CENTRIPREP ultrafiltration, ammonium sulfate precipitation and POROS 50 column chromatography. The final preparation of the HIV vector was free of replication competent cytopathic HIV and adenovirus and was capable of selective and high efficient transduction of CD4 positive cells. We also generated **adenovirus vectors** containing the self-inactivating lentivirus vector carrying the GFP gene (Ad.CAG/HIVGFP), the VSV-G gene (Ad.CAG/VSV), and the HIV rev gene (Ad.CAG/rev). Preliminary experiments showed that high titer lentiviral vectors pseudotyped with either gp120 or VSV-G could be

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 PROTEINS WITH RECOMBINANT **ADENOVIRUS**  
**VECTORS**.  
 AUTHOR(S): WILHELM J [Reprint author]; KALYAN N; CHANDA P; MURTHY S;  
 VERNON S; MOLNAR-KIMBER K; MIZUTANI S; DAVIS A; LEE S; HUNG  
 P  
 CORPORATE SOURCE: WYETH-AYERST RES, PO BOX 8299, PHILADELPHIA, PA 19101, USA  
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 TI EXPRESSION AND PROCESSING OF **HIV GAG** PROTEINS WITH  
 RECOMBINANT **ADENOVIRUS VECTORS**.  
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 INTERNATIONAL CONFERENCE ON AIDS, VOLS. 1-3. PAGINATION VARIES SIXTH  
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 SAN FRANCISCO, CALIFORNIA, USA. ILLUS. MAPS. PAPER.  
 AU WILHELM J [Reprint author]; KALYAN N; CHANDA P; MURTHY S; VERNON S;  
 MOLNAR-KIMBER K; MIZUTANI S; DAVIS A; LEE S; HUNG P